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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,977	06/14/2005	Mikko Rinne	876A.00203.U1(US)	5578

29683 7590 10/31/2006

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EXAMINER	
BROOKS, SHANNON	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/538,977	RINNE, MIKKO	
	Examiner	Art Unit	
	Shannon R. Brooks	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, and 11-16 are rejected under U.S.C. 102(b) as being anticipated by Suzuki et al. (US 5903843).

Consider Claim 1, Suzuki et al. clearly disclose and teach a method between a communications device (read as mobile device 300-A to 300-N)(Fig. 1 and Col. 3, lines 49-57) and a communications network (read as radio communication system)(Fig. 1, and Col. 3, lines 46-57), which communications network generally provides at least a direct cell access mechanism (read as reduced interference and high radio channel quality in low traffic density) (Col. 2, lines 12-18 and 33-39) and an alternative cell access mechanism (read as a higher capacity and relatively lower quality channel in higher traffic density)(Col. 2, lines 19-33) for the communications device for uplink access to the communications network (read as traffic channel assigned to a mobile)(Col. 2, lines 9-10 and Col. 4, lines 47-59)), wherein the direct cell access mechanism is a mechanism enabling the communications device to directly (based on a channel selection mode with low traffic density where an available channel with a greater CIR threshold value is chosen)(see Abstract and Col. 2, lines 33-39) start sending user data on a traffic channel (Col. 2, lines 4-11), the method comprising:

determining by the communications network and indicating to the communications device whether the direct cell access mechanism can at a given time be provided (Col. 5, lines 17-40).

Consider Claim 13, Suzuki et al. clearly disclose and teach a communications device (Fig. 1, Blocks 300-A through 300-N) configured for operation with a communications network (Fig. 1), which communications network generally provides at least a direct cell access mechanism (read as reduced interference and high radio channel quality in low traffic density) (Col. 2, lines 12-18 and 33-39) and an alternative cell access mechanism (read as a higher capacity and relatively lower quality channel in higher traffic density)(Col. 2, lines 19-33) for the communications device for uplink access to the communications network read as traffic channel assigned to a mobile)(Col. 2, lines 9-10 and Col. 4, lines 47-59)), wherein the direct cell access mechanism is a mechanism enabling the communications device to directly start based on a channel selection mode with low traffic density where an available channel with a greater CIR threshold value is chosen)(see Abstract and Col. 2, lines 33-39) sending user data on a traffic channel (Col. 2, lines 4-11), the communications device comprising: means (RF, MCU, 515, SW)(read as RF, Block 309, a processor, Block 305, memory, Block 304)(Fig. 3), and software (read as part of CPU)(Fig. 3) for receiving an indication sent by the communications network, the indication indicating to the communications device whether the direct cell access mechanism can at a given time be provided (Col. 5, lines 17-40).

Consider Claim 15, Suzuki et al. clearly disclose and teach a base station of a communications network (Fig. 2), which communications network generally provides at least a direct cell access mechanism (read as reduced interference and high radio channel quality in low traffic density) (Col. 2, lines 12-18 and 33-39) and an alternative cell access mechanism (read as a higher capacity and relatively lower quality channel in higher traffic density)(Col. 2, lines 19-33) for a communications device for uplink access (read as traffic channel assigned to a mobile)(Col. 2, lines 9-10 and Col. 4, lines 47-59) to the communications network, wherein the direct cell access mechanism is a mechanism enabling the communications device to directly (based on a channel selection mode with low traffic density where an available channel with a greater CIR threshold value is chosen)(see Abstract and Col. 2, lines 33-39) start sending user data on a traffic channel (Col. 2, lines 4-11), the base station

comprising: means for determining and indicating (Fig. 2, and Col. 4, lines 19-59)to the communications device whether the direct cell access mechanism can at a given time be provided (Col. 5., lines 32-41).

Consider Claim 16, Suzuki et al. clearly disclose and teach a system comprising a communications device (Fig. 1, Blocks 300-A through 300-N) and a communications network (read as radio communication system)(Fig. 1, and Col. 3, lines 46-57), which communications network generally provides at least a direct cell access mechanism read as reduced interference and high radio channel quality in low traffic density) (Col. 2, lines 12-18 and 33-39) and an alternative cell access mechanism read as a higher capacity and relatively lower quality channel in higher traffic density)(Col. 2, lines 19-33) for the communications device for uplink access (read as traffic channel assigned to a mobile)(Col. 2, lines 9-10 and Col. 4, lines 47-59) to the communications network, wherein the direct cell access mechanism read as reduced interference and high radio channel quality in low traffic density) (Col. 2, lines 12-18 and 33-39) is a mechanism enabling the communications device to directly based on a channel selection mode with low traffic density where an available channel with a greater CIR threshold value is chosen)(see Abstract and Col. 2, lines 33-39) start sending user data on a traffic channel (Col. 2, lines 4-11), the communications network comprising: means for determining and indicating to the communications device whether the direct cell access mechanism can at a given time be provided; and the communications device comprising: means (RF, MCU, 515, SW))(read as RF, Block 210, a processor, Block 204, memory, Block 203)(Fig. 2), and software (read as part of CPU)(Fig. 2) for receiving said indication.

Consider Claim 2, Suzuki et al. clearly disclose and teach a method according to claim 1, wherein in a situation in which the direct cell access can not be provided the method comprises: indicating to the communications device that the alternative cell access mechanism should be used ((Col. 5, lines 17-40).

Consider Claim 3, Suzuki et al. clearly disclose and teach a method according to claim 2, wherein the alternative cell access mechanism (read as a higher capacity and relatively lower quality channel in higher traffic density)(Col. 2, lines 19-33) comprises

using a separate access channel for uplink access (Fig. 9 And Col. 9, lines 48-53).

Consider Claim 4, Suzuki et al. clearly disclose and teach a method according to claim 1, wherein said indicating whether the direct cell access mechanism (read as reduced interference and high radio channel quality in low traffic density) (Col. 2, lines 12-18 and 33-39) can be provided comprises indicating whether the communications device can directly start sending user data on a traffic channel at a high data rate.

Consider Claim 11, Suzuki et al. clearly disclose and teach a method according to claim 7, wherein said message conveys to the communications device a parameter value (CIR) indicating whether the direct cell access mechanism is enabled (Col. 2, lines 33-39) and Fig. 12).

Consider Claim 12, Suzuki et al. clearly disclose and teach a method according to claim 1, wherein the communications network comprises a base station serving a cell of a mobile communications system (Fig. 1, Blocks 200-A through 200-N), and wherein the method comprises: performing traffic and/or radio measurements by the base station (received signal strength level of interference wave) (Col. 4, lines 19-59); and determining by the base station whether the direct cell access mechanism can at a given time be provided on the basis of said measurements (Col. 5., lines 32-41).

Consider Claim 14, Suzuki et al. clearly disclose and teach a communications device according to claim 13, wherein the communications device is a mobile hand-held device of a cellular communications network (Fig. 1, Blocks 300-A through 300-N and Col. 3, lines 49-57).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 5and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 5903843) in view of Rinne et al. (US 6993340 B1).

Consider Claim 5, Suzuki et al. teach a method, wherein a radio interface(read as air interface)(Fig. 1 and Col. 5, lines 6-8) except that it does not teach wherein a radio interface between the mobile communications device and the base station is layered into protocol layers which form a protocol stack, and the traffic

channel forms part of a logical traffic channel operating on a data link layer (Layer 2) of the protocol stack.

However, Rinne et al. (US 6993340) teach wherein a radio interface between the mobile communications device and the base station is layered into protocol layers which form a protocol stack, and the traffic channel forms part of a logical traffic channel operating on a data link layer (Layer 2) of the protocol stack **(Fig. 5, and Col. 8, lines 49-58)**.

Therefore, it would have been obvious to one skilled in the art to incorporate the teachings of Rinne into Suzuki to employ a preferable protocol arrangement which implements functionality **(Col. 8, lines 49-50)**.

Consider **Claim** 6, Suzuki et al. teach a method, wherein said indicating whether the communications device can directly **(based on a channel selection mode with low traffic density where an available channel with a greater CIR threshold value is chosen) (see Abstract and Col. 2, lines 33-39)** start sending user data on a traffic channel **(Col. 2, lines 4-11) except that it does not disclose** sending user data on a traffic channel is carried out on a network layer (Layer 3) of the protocol stack.

However, Rinne et al. (US 6993340) teach wherein sending user data on a traffic channel is carried out on a network layer (Layer 3) of the protocol stack **(Fig. 5, and Col. 8, lines 49-58)**.

Therefore, it would have been obvious to one skilled in the art to incorporate the teachings of Rinne into Suzuki to employ a preferable protocol arrangement that implements functionality **(Col. 8, lines 49-50)**.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 5903843) in view of Elliott (US 693747 B1).

Consider **Claim** 7, Suzuki et al. teach a method, wherein said indicating whether the direct cell access mechanism can be provided except that it does not teach a method wherein said

indicating whether the direct cell access mechanism can be provided is performed by sending a broadcast message to a set of communications devices including the communications device of claim 1.

However Elliott teaches a method wherein said indicating whether the direct cell access mechanism can be provided is performed by sending a broadcast message (Col. 2, lines 9-19) to a set of communications devices including the communications device of claim 1.

Therefore, it would have been obvious to one skilled in the art to incorporate the teachings of Elliott into Suzuki in order to disseminate channel access schedules (Col. 2, lines 17-18).

Consider Claim 8, Suzuki et al. a method, except that it does not teach a method wherein said broadcast message contains a parameter value further restricting the set of communications devices.

However, Elliott teaches a method wherein said broadcast message (Col. 2, lines 9-19) contains a parameter value (schedule collision avoidance parameters)(Col. 7, lines 22-41 and Fig. 2) further restricting the set of communications devices.

Therefore, it would have been obvious to one skilled in the art to incorporate the teachings of Elliott into Suzuki in order to aid in harmonizing collision avoidance schedules (Col. 7, lines 33-50)

Consider Claim 9, Suzuki et al. teach a method, wherein said indicating whether the direct cell access mechanism can be provided except that it does not teach a method, wherein said indicating whether the direct cell access mechanism can be provided is performed by sending a multicast message to a limited set of communications devices including the communications device of claim 1.

However, Elliott teaches a method, wherein said indicating whether the direct cell access mechanism can be provided is performed by sending a multicast message (read as disseminate to a small group of nodes)(Col. 3, lines 61-67) to a limited set of communications devices including the communications device of claim 1.

Therefore, it would have been obvious to one skilled in the art to incorporate the teachings of Elliott into Suzuki in order aid in the dissemination of transmission schedules (Col. 3, lines 61-67).

Consider Claim 10, Suzuki et al. teach a method, wherein said indicating whether the direct cell access mechanism can be provided except that it does not teach wherein said indicating whether the direct cell access mechanism can be provided is performed by sending a point-to-point message to the communications device.

However, Elliott teaches a method wherein said indicating whether the direct cell access mechanism can be provided is performed by sending a point-to-point message (Col. 4, line 2) to the communications device.

Therefore, it would have been obvious to one skilled in the art to incorporate the teachings of Elliott into Suzuki in order to use a reliable point-to-point protocol such as TCP (Col. 4, lines 2-3).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Soldani et al. (US 2004/0110521 A1) disclose a Communication System.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

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Hand-delivered responses should be brought to

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shannon Brooks whose telephone number is (571) 270-1115. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro, can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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